

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Thurman Creek

Water Body ID: 3243

Water Body Segment at a Glance:

County: Newton
Nearby City: Joplin
Length: 3 miles
Pollutant: Bacteria
Source: Rural and urban runoff



Statewide Map Showing Location of Watershed

Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm.

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Thurman Creek is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of Thurman Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Use that is impaired

- Whole Body Contact Recreation Category B (WBC-B)

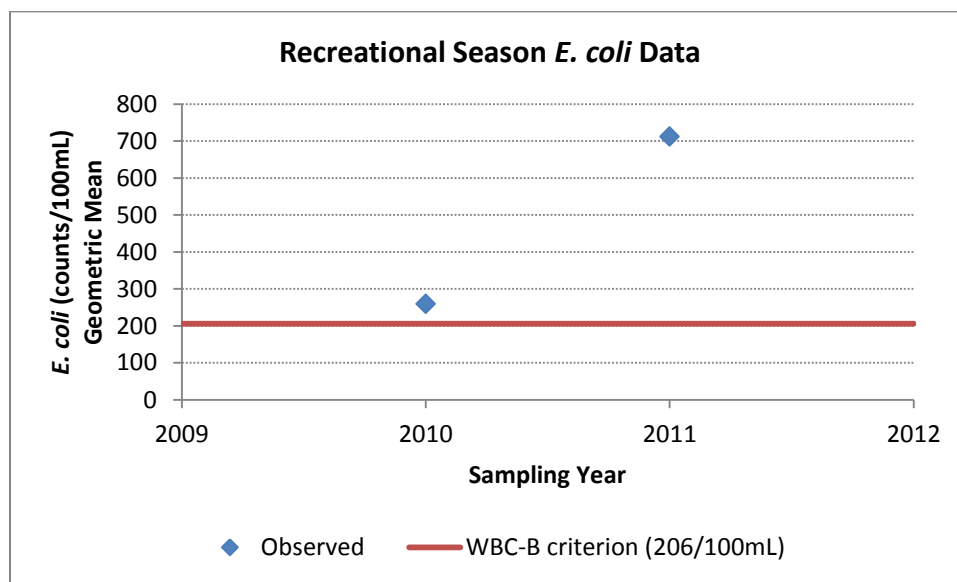
Criteria that apply

- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that for waters designated for whole body contact recreation category B, the *E. coli* bacteria count, measured as

a geometric mean, shall not exceed 206 colonies per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1 to October 31.

Assessment and water quality data

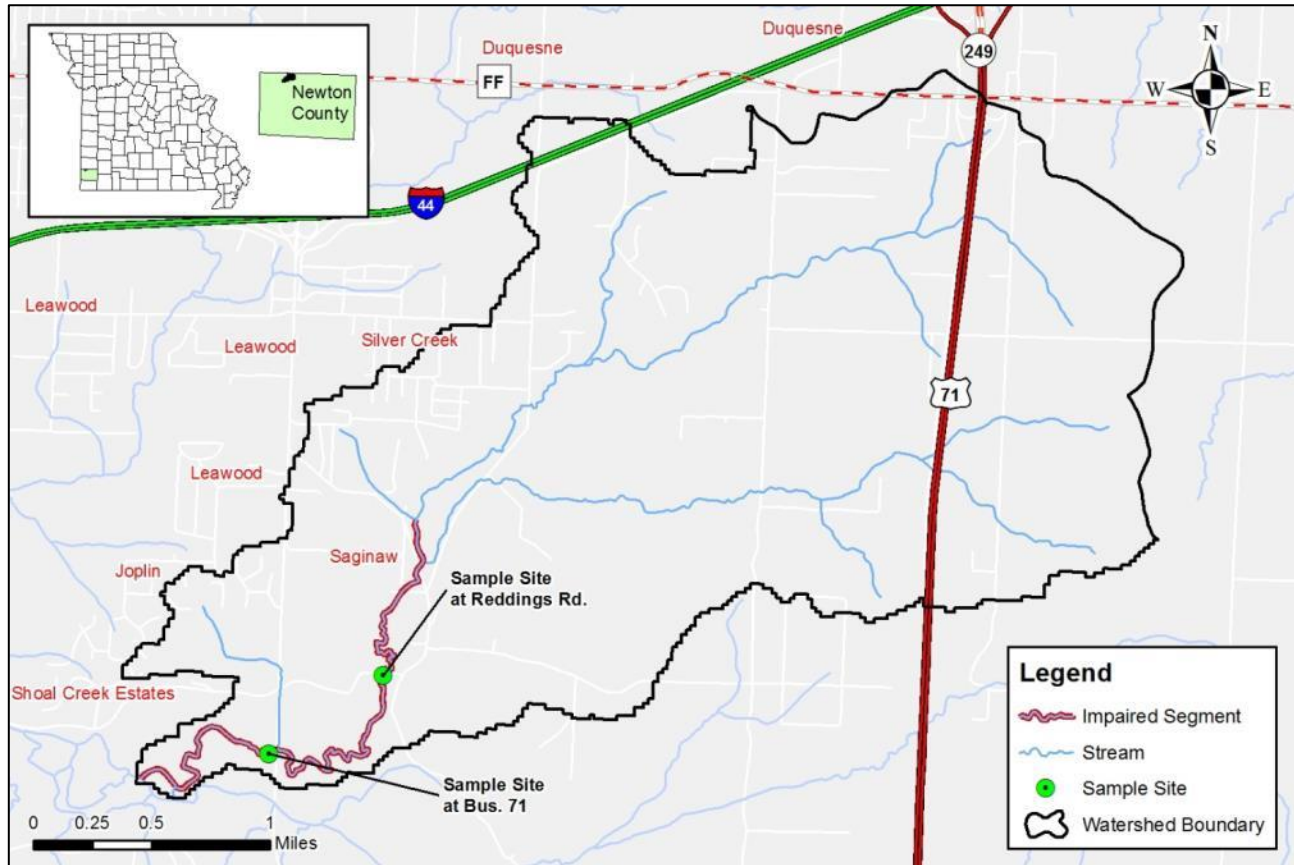
The department judges a stream to be impaired by bacteria if the water quality criterion is exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season. High counts of *E. coli* are an indication of fecal contamination. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses. Sufficient recreational season *E. coli* data to assess Thurman Creek was collected by the Newton County Health Department in 2010 and 2011. The geometric mean of this data exceeded the whole body contact category B criterion during both years.



TMDL for Thurman Creek

The Thurman Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Thurman Creek TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

Map of the Thurman Creek Watershed



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